

Remarks/Arguments

A. Status of the Claims and Claim Objections

Claims 39 and 76 are revised, non-limiting support for which can be found throughout the specification and claims as originally filed. For instance, non-limiting support for the “height R_q higher than or equal to $0.01\ \mu\text{m}$ ” phrase can be found at page 1, line 24. Non-limiting support for the “fined but unpolished” phrase can be found in the Abstract and at page 1, lines 7-8 of the specification. Non-limiting support for the “single coating” phrase can be found in the specification at page 12, lines 4, and 9-15, and Figures 1-2, both of which disclose a process of making a coated optical lens having a single coating.

Claims 63, 65, and 66 are revised by replacing “lens blank” with “optical article.”

Claim 70 is revised to remove “the”, which addresses the claim objection.

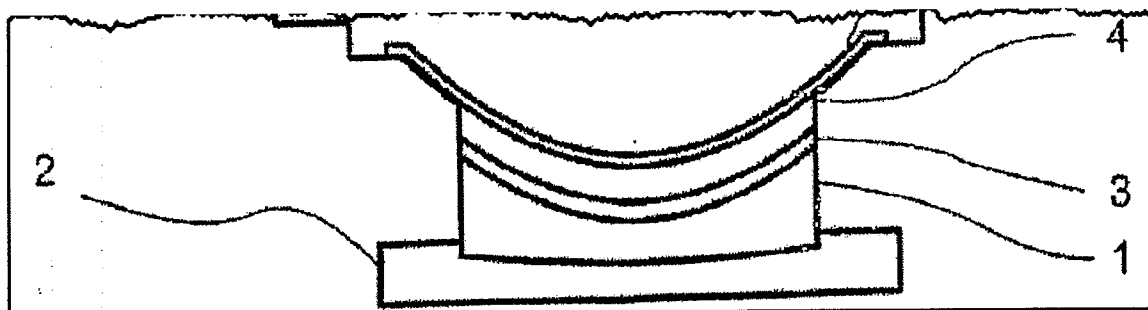
Claim 73 is revised to change its dependency, which addresses the claim objection.

B. Double Patent Rejection

Claims 39, 41, 42, 46, 51-54, 59-62, 64, 68, 70, 76, 77, and 80 are rejected on the ground of nonstatutory obviousness-type double patenting in view of claims 1-7, 10-16, and 18 of U.S. Patent 6,562,466 (“Jiang”). Applicant disagrees. However, in an effort to further the prosecution of this case and secure prompt allowance, independent claims 39 and 76 are revised to render this rejection moot.

1. The claimed processes are different from Jiang’s claim 1 process

For instance, independent claims 39 and 76 are both directed to a process for making a coated optical article. The processes include “application of a **single** coating”, which results in a coated article “having a single coating.” This is illustrated in Figure 1B (a non-limiting embodiment) of the present application:



Element "1" is the "lens blank" (page 11, line 33). Element "2" is the "lens blank holder" (page 11, line 23). Element "3" is the "coating composition" (page 11, line 34). Element "4" is the "flexible wafer" (page 11, line 33).

By comparison, claim 1 of Jiang concerns a process for transferring a coating to a lens blank. The claimed process uses two coatings: (i) a curable glue; and (ii) the coating to be transferred. The curable glue can be applied to the lens blank or to the external layer of the coating. The end result is a process that produces two distinct coating layers (*i.e.*, a curable glue layer and a transferred coating layer). This is illustrated in Figure 1C (a non-limiting embodiment) of Jiang:

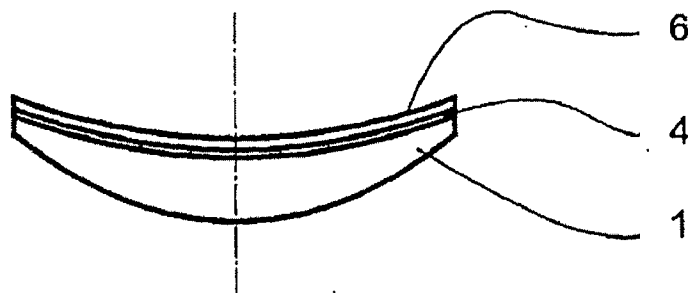


FIGURE 1C

Element "6" is the transferred "coating" layer (col. 5, line 66). Element 4 is the "UV film" or "glue film" layer (col. 5, lines 63-65). Element 1 is "lens blank" (col. 5, lines 62-63).

This difference between Applicant's claimed process and the process described in claim 1 of Jiang is not an obvious difference. For instance, Applicant's claimed processes result in the direct transfer of a coating onto an optical article, where a second glue layer is not required. This results in a more efficient production process for coating optical articles (*i.e.*, only one coating layer is used) while also avoiding any chemical interactions between a glue layer and a coating layer to be transferred (as described in Jiang).

Further, there does not appear to be any reason to modify the process described in Jiang to exclude/remove the deposition of the "curable glue" step. If this step were removed, then the process would not work for its intended purposes—it would be inoperable. That is, without the glue layer, the coating intended to be transferred to the lens blank would not be transferred, as there would be a lack of adhesion between the coating and Jiang's lens blank. Indeed, Jiang explains that the glue layer is needed to promote sufficient "adhesion of the coating to the optical surface of the blank...." Col. 4, lines 56-60. This is evidence supporting withdrawal of the double patenting rejection. MPEP § 2143.01[V] ("If the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.").

The opposite is also true—removal of the coating to be transferred to the lens blank in claim 1 of Jiang would result in a lens blank that does not have the coating. That is, it results in a modification that is simply unsatisfactory to the process described in claim 1 of Jiang—what would be the purpose of transferring only a glue layer to the lens?

2. There is no apparent reason to modify Jiang's claim 1 process to combine the coating to be transferred with the glue layer into a single coating composition

Any argument that there would be an apparent reason to modify Jiang's claim 1 process to combine the coating layer to be transferred with the glue layer into a single layer (as the Examiner appears to allege at pages 3-4 of the Action) is not supportable for several reasons. First, such a modification would change the principle of operation of the claim 1 process in Jiang. For instance, several of the steps in Jiang's claim 1 process would have to be removed (*see, e.g.*, the steps spanning col. 10, line 65, to col. 9, line 10). That is, such a modification drastically changes the way the process in claim 1 is used. *See* MPEP § 2143.01[VI] ("If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.").

Also, and more to the point, the description and corresponding data in Jiang confirm that multiple coatings are being transferred. The Jiang process includes a step of providing a support bearing a coating and a subsequent step of depositing an amount of glue. These two steps are distinct and involve two different layers—a coating layer and a curable glue layer (*i.e.*, a multi-coating transfer process):

[T]he process or method for transferring a **coating** from at least one mold part onto at least a geometrically defined surface of a lens blank comprises:

providing a lens blank having at least one geometrically defined surface;

providing a support having an internal surface bearing a **coating** and an external surface;

depositing on said geometrically defined surface of said lens blank or on said **coating** a premeasured amount of a **curable glue**....

Col. 2, lines 50-60 (underlines and emphasis added). Further, the examples in Jiang concern a multi-coating transfer process. The process utilizes a coating stack comprising impact resistant

primer, an abrasion resistant coating, and an antireflection coating (said stack is referred to as “HMC”—with the acronym being defined in Example 7), which is transferred onto the substrates. See Examples 1-9.

Further, the following passage from Jiang does not support an argument that Jiang contemplates a direct transfer process that utilizes only a single coating composition:

In one embodiment of the process of the invention, the pre-measured amount of the curable glue may consist in the **external layer of the coating** itself, in particular an impact-resistant primer layer of the coating to be transferred. This could be the case when the impact-resistant primer layer comprises UV polymerizable (meth)acrylate monomers. It can also be the anti-abrasion layer, in particular when no primer layer is to be transferred to the blank.

Col. 3, lines 5-12 (emphasis added). This passage discloses that the “external layer” of a stack of layers to be transferred borne by the support can be a curable glue. The fact that the phrase “external layer of the coating” is used means that layers other than the anti-abrasion layer, for example, are present on the support. Jiang’s use of “external layer” is telling in that it says other layers are present. This is a reasonable interpretation given that Jiang’s claims, abstract, summary of invention, detailed description, figures, and exemplary data all concern a transfer process that uses multiple coatings. That is, when the above passage is read in the context of the entire specification the only reasonable conclusion to reach is that Jiang’s disclosed process teaches and suggests to a person having ordinary skill a multi-coating transfer process.

3. Conclusion concerning the double patenting rejection

For at least the reasons discussed above, Applicant requests that the double patenting rejection be withdrawn.

C. Indefiniteness Rejections

All of the indefiniteness rejections have been addressed in the revised claim set. For instance “internal face” is replaced with “internal surface” in claims 39 and 76. Further, “lens blank” is replaced with “optical article” in claims 39, 63, 65, and 68. Applicant submits that a person having ordinary skill in the relevant field of this invention would understand that “optical article” encompasses articles such as lens blanks, lens mold, ophthalmic lenses, *etc.* Indeed, the specification even explains this at page 1, lines 4-6.

Applicant disagrees with the Examiner’s position that “fined but unpolished” is unclear. A person having ordinary skill in the relevant field of this invention would understand the meaning of “fined” and “unpolished.” Indeed, the Jiang reference provides support for this conclusion (*see* col. 3, lines 24-32). However, in an effort to further the prosecution and secure prompt allowance, claims 39 and 76 define the surface roughness “R_q” of the optical article. The specification confirms that this definition provides sufficient clarity to those of ordinary skill (*see* page 1, lines 21-31).

Applicant requests that all indefiniteness rejections under 35 U.S.C. § 112, second paragraph, be withdrawn.

D. Anticipation Rejection for Gupta

Claims 39-42, 46, 48-50, 55, 57, 64-66, 68-70, and 76 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent 5,512,371 (“Gupta”). The anticipation standard is a rather high standard to prove in that the prior art reference must disclose and arrange every element in a manner claimed by Applicant. *See In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990) (“For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every

element of the claimed invention must be identically shown in a single reference. These elements must be arranged as in the claim under review”).

Applicant disagrees with the anticipation rejection. However, in an effort to further the prosecution and secure prompt allowance, independent claims 39 and 76 now define the surface roughness “Rq” of the optical article to be at least 0.01 μm . This limitation is neither disclosed nor suggested in Gupta. Indeed, Applicant notes that dependent claims 53-54 are not subject to this rejection.

In an effort to avoid having this rejection repeated, the following detailed explanation is provided, which confirms the position taken by Applicant. Independent claims 39 and 76 both concern a process where a coating is transferred to “an article having at least one fined but unpolished geometrically defined main face having a root mean square profile R_q higher than or equal to 0.01 μm .”

By comparison, Gupta discloses a process for the application of a coating onto the surface of a lens, the process including disposing a curable optical quality resin composition between a plastic lens and the surface of a mold. *See Gupta et al.*, col. 1, lines 52-59. After curing, a cured coating is obtained that is bonded to the lens preform. *Id.* The lens surface receiving the coating is either a “finished” or “semi-finished” surface. *Id.* at col. 3, lines 34-36. The “semi-finished” lens surface is not Applicant’s claimed “fined but unpolished” surface.

Rather, a semi-finished lens is defined as having only one optically finished surface, which is obtained after having subjected the lens to a surfacing process (*i.e.*, grinding, fining and polishing). *See Jiang* at col. 3, lines 33 for extrinsic evidence support. Upon reading this reference, it is not clear whether the coating is overmolded on the surfaced face or the non surfaced face of the lens. Two hypotheses can be made:

- i) If the coating is applied on the finished surface of the lens, the latter consequently had a polished surface state before the implementation of the process, which is contrary to the teaching of the present claims.
- ii) If the coating is applied on the unfinished surface of the lens, *i.e.*, non surfaced, said surface has not been fined, which is also contrary to the teaching of the present claims.

As a conclusion, Gupta fails to disclose a process where a coating is transferred to “an article having at least one fined but unpolished geometrically defined main face having a root mean square profile Rq higher than or equal to 0.01 μm .”

Applicant requests that the anticipation rejection be withdrawn.

E. Anticipation Rejection for Jiang

Claims 39-66, 68-70, 76, and 77 are rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Jiang. Again, the anticipation standard is a rather high standard—a standard that cannot be met in the present case. All of the arguments presented in the obviousness-type double patenting rejection equally apply to this rejection and are incorporated by reference. These arguments alone confirm that the rejected claims are not anticipated by Jiang. However, in an effort to avoid having this rejection repeated, Applicant also provides the following additional comments, which confirm that the claimed process is distinct from the process disclosed in Jiang.

In order for Jiang to anticipate the claimed invention, it must disclose at the very least the following two features in a single embodiment:

- (i) transfer of a coating onto a fined but unpolished surface of an optical article; and
- (ii) where only a single coating is transferred to the article.

With respect to (i), Applicant does not dispute that Jiang discloses a method of transferring a coating onto a fined but unpolished surface of an optical article (col. 3, lines 23-32). The central issue is whether Jiang discloses a direct transfer process that results in only one coating being transferred. On this point, Jiang is clear that at least two coatings are transferred—a glue coating

layer and a functional coating layer such as an impact-resistant primer layer or an anti-abrasion layer (see FIG 1C and col. 2, line 49, to col. 3, line 4). Indeed, the glue layer is needed to promote adhesion of the functional layer to the surface of the optical article (col. 4, lines 56-60).

Therefore, any argument made by the Examiner that column 3, lines 5-16, of Jiang contemplates a direct transfer process that results in a single coating being transferred would be incorrect. Such an argument would necessarily have to ignore the “external layer” phase in this passage which indicates that additional layers are present, the entire scope and content of Jiang’s specification, figures, and claims, all of which explain that two distinct layers are used in its transfer process—a glue layer and a functional coating layer or stack of layers. Further, combining the passage at col. 4, lines 45-52 of Jiang with the passage at col. 3, lines 5-15, of Jiang would still result in two layers being transferred (*e.g.*, the glue layer is necessarily another abrasion resistant coating, which is different from the abrasion resistant coating borne by the support). One cannot avoid the fact that a separate and distinct glue layer is disclosed in all embodiments of Jiang.

Applicant requests that the anticipation rejection based on Jiang be withdrawn.

F. Obviousness Rejections

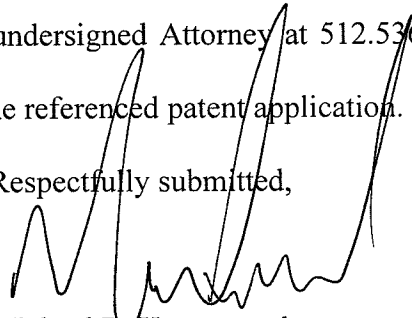
Four separate obviousness rejections are presented against dependent claims 67, 71, 72, 73, 74, 75 78, 79, 80, and 81 under 35 U.S.C. § 103(a). Action at pages 10-12. In each of these rejections, Jiang is used as the primary reference. Therefore, the arguments made in the above section concerning Jiang equally apply to these obviousness rejections and are incorporated by reference. Further, the secondary references used in the obviousness rejections (*i.e.*, Degand, Brytsche, Li, and Keller) do not supplement Jiang’s deficiencies. Therefore, the combination of the cited art fails to disclose or suggest every element of the rejected claims.

Applicant requests that all four obviousness rejections be withdrawn.

G. Conclusion

Applicant believes that this case is in condition for allowance and such favorable action is requested. The Examiner is invited to contact the undersigned Attorney at 512.536.3020 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,



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